

In general, the blade should project only far enough to allow the paraffin block to clear. Naturally, the blade might project a little farther in case of thin delicate sections than with thick hard ones, but a little experience will accustom one to the use of such a knife, and the luxury of having at all times a fresh keen cutting edge will be appreciated by all who have known the drudgery demanded by the microtome knives in general use.—CHARLES J. CHAMBERLAIN, *The University of Chicago*.

ADDITIONS TO THE GRASSES OF CUBA

Since the publication of the *Catalogue of the grasses of Cuba*,³ several additional species of grasses have been contributed to the National Herbarium by Brother LEÓN of the Colegio de la Salle, Habana. The following is a list of these:

MANISURIS EXALTATA (L. f.) Kuntze, Rev. Gen. Pl. 2:779. 1891.

Stegosia exaltata Nash, N. Amer. Fl. 17:84. 1909.

This species is retained provisionally in *Manisuris* until the genera of Andropogoneae are more carefully examined.

Sancti Spiritus, León 847.

ANDROPOGON SQUARROSUS L. f. Suppl. 433. 1781.

Habana, León 1581. Introduced.

ANDROPOGON CARICOSUS L. Sp. Pl. ed. 2. 2:1480. 1763.

Guanabacoa, León 2013. Introduced.

Sorghastrum agrostoides (Speg.).

Andropogon agrostoides Speg. Pl. Nov. Nonnul. Amer. Austr. Dec. 2:27. 1883.

Sancti Spiritus, León 895.

PASPALUM BLEPHAROPHYLLUM Nash, in Small Fl. Southeast. U.S. 71. 1903.

Marianao, León, 779.

PASPALUM HELLERI Nash, Bull. Torrey Club 30:376. 1903.

Santiago de Cuba, León 951.

PASPALUM MONOSTACHYUM (H. B. K.) Vasey, in Chapm. Fl. South. U.S. ed. 2. 665. 1889.

Zaza de Tunas, Santa Clara, León 947. The spikelets are smaller than in the typical form.

³ HITCHCOCK, A. S., Contr. Nat. Herb. 12:183-258. 1909.

Paspalum Leoninum Chase, sp. nov.—A low tufted perennial, with narrow leaves mostly crowded at the base, slender nearly naked culms and solitary usually purplish racemes. Culms 15–35 cm. high, very slender, wiry, compressed, ascending or spreading and more or less sinuous, glabrous, the nodes ascending-pubescent; lower sheaths overlapping and keeled, glabrous or sparsely pubescent on the scarious margin and with a few stiff hairs on the auricles, usually but a single leaf about midway on the culm, the sheath with a few scattered long hairs or glabrous; ligule membranaceous, about 0.5 mm. long; blades flat or somewhat involute from a folded base narrower than the summit of the sheath, 3–7 cm. long, 1–2 mm. wide, more or less curled, glabrous on both surfaces or minutely puberulent on the upper, a few stiff hairs on the margin and rarely on the upper surface, the blade of the uppermost leaf reduced to a mere tip; raceme 2–3.5 cm. long, slightly curved, a few long hairs at the base; spikelets solitary, on very short, flattened, scabrous pedicels, closely imbricated, almost concavo-convex, 1.3–1.5 mm. long, about 0.7 mm. wide, oval, glabrous; second glume 3-nerved, the sterile lemma with a nerve near either margin, the midnerve suppressed or apparent only at the summit; fruit nearly as large as the spikelet.

Type U.S. National Herbarium no. 618,754; collected August 30, 1909, on "Obispo hill, near Sancti Spiritus," by Brother *León* (no. 950).

This species is most nearly related to *Paspalum rupestre* Trin., from single-spike specimens of which it may be distinguished by the more delicate culms and the more closely imbricated, glabrous spikelets, the second glume with the midnerve suppressed.

Paspalum Leoninum is named in honor of Brother LEÓN, of the Colegio de la Salle, Vedado, Habana, whose collections have added greatly to our knowledge of the grasses of Cuba.

A second collection of this species was made on the Jata Hills, Guanabacoa, September 12, 1909, *León* 949.

CENCHRUS MYOSUROIDES H. B. K. Nov. Gen. & Sp. 1:115. 1816.

Santiago de Cuba, *León* 835.

GOUINIA POLYGAMA Fourn. Mex. Pl. 2:103. 1886.

Cojimar, *León* 2014.

ARUNDO DONAX L. Sp. Pl. 81. 1753.

Marianao, *León* 1523. Escaped from cultivation.

LOLIUM TEMULENTUM ARVENSE (With.) Bab. Man. Brit. Bot. 377. 1843.

Habana, *León* 1583. Introduced.

It may be well to record here certain changes in the names of a few species of *Panicum* listed in the *Catalogue*, as shown by the recent revision of this group.⁴

Panicum aquaticum Poir. This is a synonym of *P. dichotomiflorum* Michx. The Cuban species is *P. elephantipes* Nees.

Panicum compactum Sw. = **Lasiacis compacta** (Sw.).

Panicum distantiflorum Rich. To this species was referred *Panicum utowanaeum* Scribn. (*P. Sintenisii* Nash), which proves to be a distinct species. It is represented by two specimens from Tricornia, near Habana, *Hitchcock* 141 and *Tracy* 9089.

Panicum divaricatum L. = **Lasiacis divaricata** (L.) Hitchc.

Panicum Grisebachii Nash = **Lasiacis Grisebachii** (Nash).

Panicum hirtivaginum Hitchc. This species appears to be the same as *P. Ghiesbreghtii* Fourn. of Mexico.

Panicum laxum Sw. To this was referred *P. polygonatum* Schrad. which, however, proves to be distinct, and is easily recognized by its pubescent nodes, and by the lack of the swollen sterile palea which characterizes *P. laxum* and *P. pilosum*.

Panicum numidianum Lam. This species appears to be confined to the North African area and, though not well known, is sufficiently distinct from *P. barbinode* Trin. of Cuba and tropical America.

Panicum Rugellii Griseb. = **Lasiacis Rugellii** (Griseb.).

Panicum Sellovii Nees. An earlier name is *P. millegrana* Poir.

Panicum Sloanei Griseb. = **Lasiacis Sloanei** (Griseb.).

Panicum Swartzianum Hitchc. = **Lasiacis Swartziana** (Hitchc.).

To these may be added the following two corrections in genera allied to *Panicum*:

Mesosetum rottboellioides (H. B. K.) Hitchc. A comparison of the type specimens shows that the Cuban species is **Mesosetum loliiforme** (Hochst.) Chase (*Panicum loliiforme* Hochst.⁵).

Hymenachne auriculata (Willd.) Chase. The specimen mentioned, Wright 3863 in part, is *H. patula* Fourn.⁶—A. S. HITCHCOCK, U.S. Department of Agriculture, Washington, D.C.

⁴ HITCHCOCK and CHASE, Contr. Nat. Herb. 15:1-396. 1910.

⁵ Steud. Syn. Pl. Glum. 1:56. 1854.

⁶ Mex. Pl. 2:37. 1886.